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Schwegman, Lundberg, Woessner & Kluth, P.A.
P.O. Box 2938
Minneapolis, MN 55402

EXAMINER	
NASH, LASHANYA RENEE	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/920,549	LIN ET AL.	
	Examiner	Art Unit	
	LaShanya R. Nash	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to an Amendment filed 25 January 2006. Claims 1-30 are presented for further consideration.

Response to Arguments

Applicant's arguments filed 25 January 2006 have been fully considered but they are not persuasive.

In considering the Applicant's arguments the following factual remarks are noted:

(I) Applicant contends that the cellular devices of Yao are client devices, not server devices, and no not store server data.

(II) Applicant contends that Yao does not teach, suggest, or show motivation for servers that provide server services on behalf of a master server portion that resides in a wireless device.

(III) Applicant contends that Yao teaches away from wireless server operations.

(IV) Applicant contends that Yao does not teach, suggest, or show motivation for a support node that provides an interface between the wireless communications network and the publicly-accessible internet network that allows the server data and updates to the server data to be received form the master server portion.

(V) Applicant contends that Yao does not teach, suggest, or show motivation for a support node that routes packets from requesting client devices to the virtual server portion instead of the master server portion.

(VI) Applicant contends that Yukie does not teach a wireless server wherein the server data is available to clients when the wired connection is available.

(VII) Applicant contends that Inoue does not teach, suggest, or show motivation for a support node registering a mobile server to provide server services in response to a request from a mobile server to activate server services.

(VIII) Applicant contends that Dorenbosch does not show the support node maps a first network address for the mobile server to the virtual server portion and that the support node routes data packets that have the first network address as a destination address to the virtual server portion

In considering (I), Applicant contends that the cellular devices of Yao are client devices, not server devices, and no not store server data. Examiner asserts that the aforementioned cellular devices as disclosed by Yao are cited by the Examiner to teach a client-server architecture (Figure 1) comprising **a wireless device portion (cellular device) within a wireless network** (wireless network) to communicate wirelessly, that operates in conjunction **with a wired device portion (i.e. server) within a publicly-accessible network (i.e. Internet/high-speed network).** Examiner further asserts, that in the previous Office action (see page 4), Examiner expressly admits that the wireless device as disclosed by Yao is a **client device**. However, Examiner additionally notes that this argument is against the reference Yao individually, and one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA

1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The Examiner further applies the reference of Yukie to address these deficiencies of Yao, specifically to teach a **wireless server**. Therefore, Examiner maintains rejections as set forth below in the Office action.

In considering (II), Applicant contends that Yao does not teach, suggest, or show motivation for servers that provide server services on behalf of a master server portion that resides in a wireless device. Examiner respectfully disagrees. Examiner asserts that Yao expressly discloses **providing server services through servers**, wherein server services allow users to both access and modify stored data, and web data (*1.2 Three-Ties Application Architecture*, page 3; *2.Related Work*, page 4). Yao further expressly discloses sustaining a **communication** via the virtual portion connection (i.e. wired server connection) **on behalf of the master portion** (i.e. wireless device connection) when the wireless device becomes unavailable, thereby hiding wireless network disconnections, (*1.3 Proxy-based Recover*; page 3). Examiner asserts that these limitations further in combination with Yukie (i.e. master server residing in wireless device), subsequently teach that the aforementioned **communication sustained on behalf of the wireless portion is wireless service services**. Examiner additionally notes that this argument is against the reference Yao individually, and one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The

Examiner further applies the reference of Yukie to address these deficiencies of Yao, specifically to teach a **wireless server**. Therefore, Examiner maintains rejections as set forth below in the Office action.

In considering (III), Applicant contends that Yao teaches away from wireless server operations. Examiner respectfully disagrees. Examiner asserts that Yao expressly discloses a configuration that employs wireless servers (i.e. mobile hosts) without either explicitly or suggestively teaching away from the use of wireless servers (i.e. Neves and Fuchs; *2. Related Work*, page 4). Applicant states in their specification, similarly to Yao, that wireless connections are unreliable, but also discloses the user of wireless servers (Specification, page 3, lines 1-7). Therefore, this reasoning of stating reliability shortcomings of wireless communications cannot be indicative of teaching away from the use of wireless servers. Furthermore, Examiner asserts that the problem recited by Applicant which is considered to be of particular concern to Yao (i.e. providing a reliable wired connection for failure recover of wireless networks) is directly pertinent to the particular problem in which Applicant in concerned with addressing in their invention (Specification, page 3, lines 7-10; page 4, lines 13-22). Therefore, Examiner maintains rejections as set forth below in the Office action.

In considering (IV), Applicant contends that Yao does not teach, suggest, or show motivation for a support node that provides an interface between the wireless communications network and the publicly-accessible Internet network that allows the

server data and updates to the server data to be received from the master server portion. Examiner respectfully disagrees. Examiner asserts that Yao expressly discloses a **support node** (i.e. proxy server) that provides an interface between the wireless communications network and the publicly-accessible Internet network (i.e. proxy translates requests and responds to them in appropriate formats and forwards them to the client and the server; *1.2 Three-Ties Application Architecture*, pages 2-3; Figure 1). Yao further expressly discloses that the support node (i.e. proxy) continuously updates information from the wireless device portion as it receives messages via the wireless network from the cellular device, thereby maintaining a consistency in the latest information provided by the master portion (*1.3 Proxy-based Recovery*, page 3). Examiner asserts that these limitations further in combination with Yukie (i.e. storing information in a master server residing in wireless device), subsequently teach that the aforementioned **updated information received from the wireless device portion is server data information (i.e. information resident in a server)**. Examiner additionally notes that this argument is against the reference Yao individually, and one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The Examiner further applies the reference of Yukie to address these deficiencies of Yao, specifically to teach a **wireless server**. Therefore, Examiner maintains rejections as set forth below in the Office action.

In considering (V), Applicant contends that Yao does not teach, suggest, or show motivation for a support node that routes packets from requesting client devices to the virtual server portion instead of the master server portion. Examiner respectfully disagrees. Examiner asserts that Yao expressly discloses the support node (i.e. proxy server) maintains a communication connection through forwarding data from a client to the virtual server portion (i.e. wired server) when the wireless connection disconnects, (*3.3 Recovery From Client Disconnections*; page 6). Yao further discloses that communication between the aforementioned client, proxy, and server is accomplished using the standard TCP/IP protocol (i.e. packet routing), (*1.2 Three-tier Application Architecture*; page 2). Therefore, Examiner asserts that the disclosure of Yao teaches a support node that routes packets from requesting client devices to the virtual server portion instead of the master server portion, that is consistent with the limitations recited in Applicant's claims. As a result, Examiner maintains rejections as set forth below in the Office action.

In considering (VI), Applicant contends that Yukie does not teach a wireless server wherein the server data is available to clients when the wired connection is available. Examiner respectfully disagrees. Examiner asserts that Yukie is cited to teach a **master server portion residing in a wireless device**. Contrary to Applicant's argument, Examiner asserts that Yukie expressly discloses that the wireless server provides server data (i.e. data from the server requested by the client) that is available to clients when the wired connection is not available (i.e. data server is configured to

send server files to user device across wireless connection; column 4, lines 50-55; column 6, lines 27-31). As a result, Examiner maintains rejections as set forth below in the Office action.

In considering (VII), Applicant contends that Inoue does not teach, suggest, or show motivation for a support node registering a mobile server to provide server services in response to a request from a mobile server to activate server services. Examiner respectfully disagrees. Examiner asserts that Inoue discloses a support node (i.e. management device) for registering information regarding mobile sever (i.e. mobile computers) in order to provide appropriate server services (i.e. selecting appropriate caching server for providing web data to user) in response to a request from a mobile server to activate server services (i.e. connection message), (column 11, lines 12-33). As a result, Examiner maintains rejections as set forth below in the Office action.

In considering (VIII), Applicant contends that Dorenbosch does not show the support node maps a first network address for the mobile server to the virtual server portion and that the support node routes data packets that have the first network address as a destination address to the virtual server portion. Examiner respectfully disagrees. Examiner asserts that Dorenbosch shows a support node (i.e. LAN controller) wherein communications intended for a wireless device at a first network address (IP address of MS used for wireless connection; paragraph [0009], lines 10-15) are routed through the wired connection to a destination address mapped to the virtual

server portion (i.e. newly assigned IP address for MS in wired LAN; paragraph [0010], lines 10-18). Examiner additionally asserts that citing Dorenbosch's disclosure regarding switching communications between wireless and wired communication is to establish the reference as an analogous art, and not intended to read on Applicant's claim limitations. As a result, Examiner maintains rejections as set forth below in the Office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,10,14, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yao ["Proxy-Based recovery for Applications on Wireless Hand-held Devices"-IEEE] in view of Yukie et al. (US Patent 6,956,833), hereinafter referred to as Yao and Yukie respectively.

In reference to claim 1, Yao discloses a system wherein a proxy server is employed to sustain a client's connection when a disconnection is experienced in a wireless environment, (*abstract; 1. Introduction*). Yao discloses:

- A mobile server, (Figure 1: Application Architecture, page 3) comprising:
  - A master portion residing within a wireless communication device (i.e. cellular devices; Figure 1) to operate within a wireless communications network (i.e.

wireless network; Figure 1) to communicate data wirelessly (*1.2 Three Tier Application Architecture,* pages 2-3); and

- A virtual server portion, (i.e. server) configured to operate within a publicly-accessible internet network (i.e. high-speed network) and accessible to clients devices through the publicly-accessible internet to store the data (*1.2 Three Tier Application Architecture*); and to receive updates to information from the master portion through a support node (i.e. proxy server), the support node to provide interface between the wireless communications network and the publicly-accessible internet network (*1.3 Proxy-based Recovery*); and
- wherein the virtual server portion is to provide the server data and services on behalf of the master server portion over the publicly-accessible internet network to client devices requesting the server data and server services from the mobile server by routing packets from the requesting client devices to the virtual server portion instead of the master server portion, (*3. Failure Recovery Protocol*, Pages 5-6).

However, the system as disclosed by Yao has an architecture comprising a wireless client and a wired server, as opposed to Applicant's claimed wireless server to store master versions of server data and client devices connected to the publicly-accessible internet. Nonetheless, these limitations were well known in the art at the time of invention as further evidenced by Yukie. Therefore, it would have been obvious for one of ordinary skill in the art to accordingly modify the aforementioned system as disclosed by Yao.

In an analogous art, Yukie discloses a system for retrieving stored data through Internet or wireless connections, (abstract). Yukie discloses a wireless server (i.e. data server; Figure 1-item 16) to store master versions of server data (i.e. data server employed as primary storage for data; column 3, lines 48-55) in communication with one or more a base stations (i.e. communicates with base station via wireless link; Figure 1-items 14&20). Yukie further discloses that stored data from the server is accessed from a terminal through a network connection to the Internet, (i.e. terminal and internet; Figure 1-items 26&22). One of ordinary skill in the art would have been motivated to accordingly modify the functionality of Yao by integrating the architecture of Yukie, so as to compensate for low communication bandwidth, slow process and limited of hand-held devices employed as servers, thereby increasing system reliability (Yao; *abstract*).

In reference to claim 10, Yao discloses a system wherein a proxy server is employed to sustain a client's connection when a disconnection is experienced in a wireless environment, (abstract; *1. Introduction*). Yao discloses:

- A system (Figure 1: Application Architecture, page 3) that provides mobile server service comprising:
- A mobile server to service client requests, the mobile server comprising
- A virtual server portion (i.e. server; Figure 1) to operate in a publicly-accessible internet network (i.e. high-speed network; Figure 1) and a master portion within a wireless communication device (i.e. cellular devices; Figure 1) to operate in a

wireless communication system (i.e. wireless network; Figure 1), (*1.2 Three Tier Application Architecture*); and

- A support node (i.e. proxy; Figure 1), to route client requests received through the publicly-accessible Internet network to the virtual server portion for servicing to convert data packets between a wireless packet radio format of the wireless communication system and an Internet network format of the publicly-accessible Internet network, wherein the support node is to map a public address for the mobile sever to the virtual server portion in response to a request from the mobile server to activate the server services; and wherein the virtual server portion is to provide the server data and services on behalf of the master server portion over the publicly-accessible internet network to client devices requesting the server data and server services from the mobile server, (*1.3 Proxy-based Recovery*, pages 3-4; *3. Failure Recovery Protocol*, pages 5-6).

However, the system as disclosed by Yao has an architecture comprising a wireless client and a wired server, as opposed to Applicant's claimed wireless server to store master versions of server data and client devices connected to the publicly-accessible internet. Nonetheless, these limitations were well known in the art at the time of invention as further evidenced by Yukie. Therefore, it would have been obvious for one of ordinary skill in the art to accordingly modify the aforementioned system as disclosed by Yao.

In an analogous art, Yukie discloses a system for retrieving stored data through Internet or wireless connections, (abstract). Yukie discloses a wireless server (i.e. data

server; Figure 1-item 16) to store master versions of server data (i.e. data server employed as primary storage for data; column 3, lines 48-55) in communication with one or more a base stations (i.e. communicates with base station via wireless link; Figure 1-items 14&20). Yukie further discloses that stored data from the server is accessed from a terminal through a network connection to the Internet, (i.e. terminal and internet; Figure 1-items 26&22). One of ordinary skill in the art would have been motivated to accordingly modify the functionality of Yao by integrating the architecture of Yukie, so as to compensate for low communication bandwidth, slow process and limited of hand-held devices employed as servers, thereby increasing system reliability (Yao; *abstract*).

In reference to claim 14, Yao discloses a method wherein a proxy server is employed to sustain a client's connection when a disconnection is experienced in a wireless environment, (abstract; *1. Introduction*). Yao discloses:

- A method for providing mobile server services from a wireless communication device comprising, (abstract; *1. Introduction;* Figure 1: Application Architecture, page 3)
- Receiving at a support node (i.e. proxy; Figure 1), a request from the mobile device to activate server services and mapping, by the support node in response to the request, a first network address for the mobile server to a virtual server portion of the mobile server; receiving server data for the virtual server portion from a master server portion of the mobile server through a wireless network;

servicing the client request by the virtual server portion on behalf of the master server portion providing at least some of the server data, (*1.2 Three Tier Application Architecture,* pages 2-3;*1.3 Proxy-based Recovery*, pages 3-4);

- Routing a client request received from a client through a publicly accessible internet network for server service to the virtual portion (i.e. server; Figure 1); and wherein the master portion resides in the wireless communication device (i.e. cellular device) and updates the data within the virtual server portion (i.e. wireless devices updates information at proxy as messages are received from the wireless devices; *1.3 Proxy-based Recovery*, page 3) and wherein the virtual portion operates within the publicly-accessible internet network (i.e. high-speed network; Figure 1) and communicates the server data with requesting client devices whether or not the master portion is accessible through the wireless network, wherein the support node provides an interface between the publicly-accessible internet network and the wireless network, (3. *Failure Recovery Protocol*, pages 5-6).

However, the method as disclosed by Yao is employed in an architecture comprising a wireless client and a wired server, as opposed to Applicant's claimed wireless server that stores a master version of the server data and client devices connected to the publicly-accessible internet. Nonetheless, these limitations were well known in the art at the time of invention as further evidenced by Yukie. Therefore, it would have been obvious for one of ordinary skill in the art to accordingly modify the aforementioned method as disclosed by Yao.

In an analogous art, Yukie discloses a method for retrieving stored data through Internet or wireless connections, (abstract). Yukie discloses a wireless server (i.e. data server; Figure 1-item 16) that stores a master version of the server data (i.e. data server employed as primary storage for data; column 3, lines 48-55) in communication with one or more a base stations (i.e. communicates with base station via wireless link; Figure 1-items 14&20). Yukie further discloses that stored data from the server is accessed from a terminal through a network connection to the Internet, (i.e. terminal and internet; Figure 1-items 26&22). One of ordinary skill in the art would have been motivated to accordingly modify the functionality of Yao by integrating the architecture of Yukie, so as to compensate for low communication bandwidth, slow process and limited of hand-held devices employed as servers, thereby increasing reliability (Yao; *abstract*).

In reference to claim 28, Yao discloses a method wherein a proxy server is employed to sustain a client's connection when a disconnection is experienced in a wireless environment, (abstract; *1. Introduction*).

- A method of operating a server having a master portion residing in a wireless communication device (i.e. cellular device; Figure 1) and a virtual portion (i.e. server; Figure 1) operating in a publicly-accessible internet network, the method comprising (*1.2 Three Tier Application Architecture,* pages 2-3; Figure 1: Application Architecture, page 3):
- Registering with a support node (i.e. proxy; Figure 1) to provide server services, the support node providing an interface between a wireless network

and the publicly-accessible internet network and supporting packet radio data communications for the wireless communication device over the wireless network (*1.3 Proxy-based Recovery*, pages 3-4);

- Transmitting server data from the master server portion to the support node over the wireless network for routing to the virtual portion over the publicly-accessible network the support node is to map a public address for the mobile sever to the virtual server portion in response to a request from the mobile server to activate the server services; virtual server receiving updates to server information from the master server; and wherein the virtual server portion is to provide the server data and services on behalf of the master server portion over the publicly-accessible internet network to client devices requesting the server data and server services from the mobile server; network (*1.3 Proxy-based Recovery*, pages 3-4); and
- Receiving client data updates at the master server portion from the support node over the wireless network wherein requests for server services are provided by the virtual server portion whether or not the master server portion is available, (i.e. buffered client messages sent to the wireless portion from the proxy in reconnection; *1.3 Proxy-based Recovery*, pages 3-4; 3. *Failure Recovery Protocol*, pages 5-6).

However, the method as disclosed by Yao is employed in an architecture comprising a wireless client and a wired server, as opposed to Applicant's claimed wireless server stores a master version in the server data and client devices connected to the publicly-

accessible internet. Nonetheless, these limitations were well known in the art at the time of invention as further evidenced by Yukie. Therefore, it would have been obvious for one of ordinary skill in the art to accordingly modify the aforementioned method as disclosed by Yao.

In an analogous art, Yukie discloses a method for retrieving stored data through Internet or wireless connections, (abstract). Yukie discloses a wireless server (i.e. data server; Figure 1-item 16) wherein the wireless server stores a master version of the server data (data server employed as primary storage for data; column 3, lines 48-55) in communication with one or more a base stations (i.e. communicates with base station via wireless link; Figure 1-items 14&20). Yukie further discloses that stored data from the server is accessed from a terminal through a network connection to the Internet, (i.e. terminal and internet; Figure 1-items 26&22). One of ordinary skill in the art would have been motivated to accordingly modify the functionality of Yao by integrating the architecture of Yukie, so as to compensate for low communication bandwidth, slow process and limited of hand-held devices employed as servers, thereby increasing reliability (Yao; *abstract*).

Claims 2-5, 7, 13, 15, 18, 19, 20, 22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yao and Yukie as applied to claims 1,10,14, and 28 above, and further in view of Inoue et al. (US Patent 6,874,017), hereinafter referred to as Inoue.

In reference to claim 2, the references fail to show at the support node registers the mobile server to provide the services in response to a request from the mobile server to activate the server services. However, these limitations would have been an obvious modification to the aforementioned system, as evidenced by Inoue.

In an analogous art, Inoue discloses a method employed for transmission of server data between a mobile computing device via a wireless communication network and an information server (e.g. virtual server) accessible via the Internet, (abstract; columns 2-5). Inoue discloses an equivalent configuration as applicant's claimed invention. Inoue further discloses at the support node registers the mobile server to provide the services in response to a request from the mobile server to activate the server services, (column 11). One would have been so motivated to implement the operation disclosed by Inoue into the configuration of the server as disclosed by Yao and Yukie, so as to provide continued access to data on mobile server through wired access when a quality wireless connection is unavailable (Dorenbosch paragraph [0003]; paragraph [0010]).

In reference to claim 3, Inoue shows the support node to receive the client request from a client device over the data network addressed to the mobile server, and the support node to route the client request to the virtual server portion to service the client request (columns 1-2; column 8).

In reference to claim 4, Inoue shows the wireless communication device to communicate in accordance with a packet radio service communication format and the service node to convert data packets between the packet radio service communication format of a wireless communication system and a data packet format of the data network (columns 7-9).

In reference to claim 5, Inoue shows the master server portion and the virtual server portion each comprise: Web-page data; client data associated with one more client devices; and server data, wherein when the wireless communication device is in communication with one of the base stations, (e.g. web-page data; client data; and server data; base stations; columns 9-11; Figure 1-items 12); and Dorenbosch shows the support node to provide an update to the client data in the master server portion, the update buffered the virtual server portion (e.g. address; update data; paragraphs 9-10).

In reference to claim 7, Inoue shows the virtual server portion to provide the Web-page data to client devices over the data network using an internet communication protocol in response to the client requests both when the wireless communication device is in communication with one of the base stations and when the wireless communication device is not in communication with one of the base stations. (columns 1-2).

In reference to claim 13, Inoue shows the server data comprises a Web page, the virtual server portion to provide the Web page to a client device in response to a client request over the wireline data network. (columns 9-11).

In reference to claim 15, Inoue shows receiving the client request through the data network, and wherein the virtual server portion resides in a fixed location (columns 7-9).

In reference to claim 18, Inoue shows the servicing comprises providing a Web page to a client device (columns 9-11).

In reference to claim 19, Inoue shows the servicing further comprises allowing the client device access to Web-site data stored on the virtual server portion (columns 1-2).

In reference to claim 20, Inoue shows receiving the client request directed to the mobile server at a support node supporting wireless packet radio communications with the wireless communication device (columns 7-8).

In reference to claim 22, Inoue shows the client request comprises a request using a hypertext transmission protocol and is a request from a Web browser operating on the client device to transfer a hypertext markup language file to the client device from the mobile server (columns 1-2).

In reference to claim 25, Inoue shows routing the data packets that comprise the updated client data further comprises converting the data packets from a data network format to a wireless packet radio communication system format. (columns 7-9).

Claims 6, 8,9,11,12,16,17,21,23,24,26,27,29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yao and Yukie as applied to claims 1,10,14, and 28 above, and further in view of Dorenbosch (US Patent Application Publication 2002/0114317), hereinafter referred to as Dorenbosch.

In reference to claim 6, the references fail to show updating the server data and the Web-page data of the virtual server portion through the support node using a network address of the virtual server portion, the update to the server data and the webpage data being buffered by the master server portion until the master server [portion has access to the support node. However, these limitations would have been an obvious modification to the aforementioned system, as evidenced by Dorenbosch.

In an analogous art, Dorenbosch discloses an apparatus for switching an ongoing communication of information between a wireless connection and a wired connection (abstract). Dorenbosch updating the server data and the Web-page data of the virtual server portion through the support node using a network address of the virtual server portion, the update to the server data and the webpage data being buffered by the master server portion until the master server [portion has access to the support node (paragraphs [0009]-[0010]). One would have been so motivated to implement the operation disclosed by Dorenbosch into the configuration of the server as

disclosed by Yao and Yukie, so as to provide continued access to data on mobile server through wired access when a quality wireless connection is unavailable (Dorenbosch paragraph [0003]; paragraph [0010]).

In reference to claim 8, Dorenbosch shows the mobile server has a private network address and a public network address associated therewith, and wherein: the support node to route data packets that have the public network address as a destination address to the virtual server portion; the support node to route data packets that have the private network address as a destination address to the master server portion; and the support node to route data packets that have a network address of the virtual server portion to the virtual server portion (paragraph [0010]).

In reference to claim 9, Dorenbosch shows the data packets having the public address as the destination address comprise the client request, the data packets having the private network address as the destination address comprise updates to client data from the virtual server portion intended for the master server portion, and the data packets having the network address of the virtual server portion comprise updates to server data from the master server portion intended for the virtual server portion (paragraphs [0007]-[0010]).

In reference to claim 11, Dorenbosch shows the mobile server comprises client data and the server data, the master server portion to update the server data on the virtual

server portion when the master server portion is in communication with the wireless communication system, the virtual server portion to update the client data on the master server portion when the master server portion is in communication with the wireless communication system (paragraph [0010]).

In reference to claim 12, Dorenbosch shows the virtual server portion to buffer updated client data until the master server portion is in communication with the wireless communication system (paragraph [0010]).

In reference to claim 16, Dorenbosch shows receiving the client request at a support node, the support node providing an interface between the wireless network and the data network, the wireless network supporting wireless packet radio communications; and communicating the server data through the wireless network from the wireless communication device to the support node (paragraph [0010]).

In reference to claim 17, Dorenbosch receiving, at the support node, the client request comprising data packets addressed to the mobile server; identifying the client request by the support node as being directed to the mobile server; and routing, by the support node, the client request to the virtual server portion over the data network (paragraph [0009]-[0010]).

In reference to claim 21, Dorenbosch shows the client request comprises data packets in accordance with an Internet communication protocol (paragraphs [0009]-[0010]).

In reference to claim 23, Dorenbosch shows comprising buffering updated client data in the virtual server portion until the master server portion is available to receive the updated client data (paragraph [0010]).

In reference to claim 24, Dorenbosch shows the virtual server portion addresses data packets that comprise the updated client data to a private network address of the mobile server, the support node recognizing the private address and routing the data packets to the master server portion over the wireless network (paragraphs [0009]-[0010]).

In reference to claim 26, Dorenbosch shows the mobile server has a private network address and a public network address associated therewith, and wherein the method further comprises a support node: routing data packets that have the public network address as a destination address to the virtual server portion; routing data packets that have the private network address as a destination address to the master server portion; and routing data packets that have a network address of the virtual server portion to the virtual server portion (paragraphs [0007]-[0010]).

In reference to claim 27, Dorenbosch the data packets having the public address as the destination address comprise the client request, the data packets having the private

network address as the destination address comprise updates to client data from the virtual server portion intended for the master server portion, and the data packets having the network address of the virtual server portion comprise updates to server data from the master server portion intended for the virtual server portion (paragraphs [0007]-[0010]).

In reference to claim 29, Dorenbosch shows the server has a private network address and a public network address associated therewith, and wherein the method further comprises the wireless communication device transmitting a request to activate the server services, and in response to an activation, the support node routes data packets received from client devices that have the public network address as a destination address to the virtual server portion (paragraphs [0007]-[0010]).

In reference to claim 30, Dorenbosch shows response to the activation, the support node routes data packets from the virtual server portion that have the private network address as a destination address to the master server portion, and routes data packets from the master server portion that have a network address of the virtual server portion to the virtual server portion (paragraphs [0007]-[0010]).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShanya R Nash whose telephone number is (571) 272-3957. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShanya Nash
Art Unit, 2153
April 26, 2006

KRISNA LIM
PRIMARY EXAMINER